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INSTRUCTIONS FOR USE
SINGLE SPLIT AIR CONDITIONER WITH GAS R410A / R410A INVERTER

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ELECTRICAL CONNECTION

Thank you for selecting a Whirlpool air conditioner. For best results, please keep this Manual properly for future reference.

This appliance is marked according to the European directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).
By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The symbol **on the product, or on the documents accompanying the product, indicates that this appliance may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.**

Disposal must be carried out in accordance with local environmental regulations for waste disposal.
For more detailed information about treatment, recovery and recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

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PRECAUTIONS FOR USE

Warning:

- Make sure to insert the power plug securely. Insecure insertion of the plug may cause electrocution or fire.
- Never unplug the machine while running.
- Do not damage the cord or use an unapproved cord.
- Do not plug other electric appliances into the same socket or use extension cords.
- Never operate the air conditioner with wet hands.
- Do not pull the plug out by the cord. This could cause the cord to overheat and catch fire.
- Turn off the air conditioner and pull out the plug when cleaning the air conditioner. This will prevent electrocution or injury.
- The rated voltage of this air conditioner is 220-240V with a tolerance of ±22V for fluctuation. The compressor will vibrate if the voltage is too low, causing damage to the cooling system.
- If you notice anything unusual (e.g. burnt smell), switch off the power supply immediately and contact the Whirlpool Authorized Service Center nearest you.
  If the abnormal condition continues, the air conditioner could be damaged and could also cause electrocution or fire.
- Grounding: The unit must be reliably grounded. The grounding cable must be connected to the special grounding system in the building.
  If the building does not have a grounding system, ask an expert electrician to install one. Never connect the grounding cable to a gas pipe, water pipe, sewage pipe or other unless the professional considers it reliable.
- Make sure to unplug air conditioner when not in use for an extended period. Accumulation of dust could cause heating or fire.
- Set the room temperature appropriately. The difference between indoor and outdoor temperature should be 5°C. Appropriate adjustment of the temperature setting serves to reduce consumption.
- When the air conditioner is running, do not leave doors and windows open in the room. This will prevent loss of effectiveness of the air conditioner.
- Never block the air inlet or outlet of indoor and outdoor unit, as this will decrease the effect of the air conditioner or cause it to shut down or even catch fire.
- Spray cans, chemicals and gas tanks must be placed at least 1m away from the indoor and outdoor unit; they could cause fire or explosion
- Make sure to mount the outdoor unit on a sturdy base. If the base is damaged and unsteady, the unit could fall and cause injury.
- Do not stand or place anything on the outdoor unit. Persons or objects falling from the unit could cause injuries.
- Do not repair the air conditioner yourself. Incorrect repairs could cause electrocution or fire. Contact the Whirlpool Authorized Service Center nearest you for repairs.
- Adjust the air flow and direction properly. When the air conditioner is running, you can adjust the air flow direction by setting the upper/lower guide louver position using the remote control or handle.
- Never reach with your finger or a stick into the indoor or outdoor unit.
- Never blow the air directly at pets or plants, as this may harm them.
- Never spray water onto the unit or wash the air conditioner with water.
- Never let the air conditioner blow on a heat source. This could put the flame out and cause carbon monoxide poisoning.
- To avoid any harm to your health, do not blow the cold air on your body too long or lower the room temperature too much.
- This air conditioner cannot be used for drying clothes or chilling foods.

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Warning:

- Do not cut or damage the power cords and control lines. Any damaged power cords and signal control lines of the air conditioner must be replaced by qualified technicians with special cords.
- Persistent abnormality indicates that the air conditioner may be damaged with the consequent risk of electric shock or fire. This may cause an electric shock.
- To prevent fire always use a special power supply circuit.
- Disconnect the air conditioner from the power supply if it is to be left unused for a long period.
- For 18-23K, 230V, with a tolerable fluctuation of ±23V. The compressor is subject to strong vibrations under very low voltages which can damage the refrigerating system. Electrical elements are easily damaged by high voltage.
- Ensure that the power supply is suitably protected by a special circuit with air breaker. The air conditioner automatically starts or stops according to requirements. Do not switch the air conditioner on and off too often as this can damage the appliance. This may cause an electric shock or injury.
- Do not cut or damage the external cable. Any damaged external cable must be replaced by qualified electricians.

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SPECIFICATIONS AND TECHNICAL DATA (DEPENDING ON THE MODEL)

Model		AMC 996	AMC 998
Functions		Cool/Heat	Cool/Heat
Cooling capacity (W)		2638 (1452~3441)	3710 (1935~3925)
Heating capacity (W)		2784 (1882~3817)	4140 (2151~4409)
Rated Voltage		220-240V~	220-240V~
Rated Frequency		50Hz	50Hz
Cooling/Heating rated current		3.17/3.48A	4.83/5.11A
Maximum input current		6.1A	6.4A
Cooling/Heating rated power		755/819W	1134/1259W
Energy efficiency ratio		3.56/3.65A	3.4/3.41A
Energy Class		A/A	A/B
Air circulation volume (m3/h)		450	550
Refrigerant and weight		R410A 1.25Kg	R410A 1.25Kg
Moisture Protection Class		IPX4	IPX4
Noise (Indoor/Outdoor) dB(A)		35/52	37/52
Climate type		T1	T1
Anti-electric shock protection		I	I
Weight (kg) Indoor unit/ Outdoor unit		11/45	11/45
Dimensions (cm) WxHxD	Indoor unit	830x285x189	
	Outdoor unit	848x540x320	

Model		AMC 993	AMC 994
Functions		Cool/Heat	Cool/Heat
Cooling capacity (W)		5275	6741
Heating capacity (W)		5862	7474
Rated Voltage		220-240V~	220-240V~
Rated Frequency		50Hz	50Hz
Cooling/Heating rated current		7.98/7.36A	10.25/10.57A
Cooling/Heating rated power		1813/1673W	2357/2431W
Max. Power Input		2400	3500
Energy efficiency ratio		3.06/3.67A	3.06/3.21A
Energy Class		B/A	B/C
Air circulation volume (m3/h)		840	930
Refrigerant and weight		R410A 1.7Kg	R410A 2.35Kg
Noise (Indoor/Outdoor) dB(A)		44/55	46/55
Climate type		T1	T1
Moisture Protection Class		IPX4	IPX4
Anti-electric shock protection		I	I
Weight (kg) Indoor unit/ Outdoor unit		13/45	13/75
Dimensions (cm) WxHxD	Indoor unit	1020x310x228	1020x310x228
	Outdoor unit	848x592x320	950x840x412

Model		AMC 990	AMC 991	AMC 992
Functions		Cool/Heat	Cool/Heat	Cool/Heat
Cooling capacity (W)		2257	2689	3664
Heating capacity (W)		2257	2843	3957
Rated voltage		220-240V~	220-240V~	220-240V~
Rated frequency		50Hz	50Hz	50Hz
Cooling/Heating rated current		2.98/2.89A	3.87/3.59A	4.79/5.17A
Cooling/Heating rated power (W)		676/654	876/814	1122/1171
Energy efficiency ratio		3.35/3.61	3.35/3.69	3.41/3.45
Energy class		A/A	A/A	A/B
Air circulation volume (m3/h)		422	422	479
Refrigerant and weight		R410A 0.95Kg	R410A 1.0Kg	R410A 1.2Kg
Noise (Indoor/Outdoor) dB(A)		33/50	33/50	37/54
Climate type		T1	T1	T1
Moisture Protection Class		IPX4	IPX4	IPX4
Anti-electric shock protection		I	I	I
Weight (kg) Indoor unit/Outdoor unit		11/25	11/30	11/40
Dimensions (cm) WxHxD	Indoor unit	830x285x189	830x285x189	830x285x189
	Outdoor unit	660x428x255	848x540x320	848x540x320

1. The above data may change without notice. The data on the rating are accurate.
2. When the unit is started again after a stop, it automatically resumes in the same mode as when it was stopped. The outdoor unit starts after a slight delay.

Working temperature range:

Working temperature range AMC 996, AMC 998		
	Inside Temp DB/WB (°C)	Outside Temp DB/WB (°C)
Maximum cooling	32/23	43/26
Minimum cooling	21/15	21/-
Maximum heating	27/-	24/18
Minimum heating	20/-	-10/-

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INSTRUCTIONS FOR USE

The Principle and Special Functions of Cooling Mode

Principle:

The air conditioner absorbs heat from indoor air and discharges it outdoors, thus lowering the indoor room temperature. Cooling capacity decreases with a rise in outdoor temperatures.

Anti-freeze Function:

Frost may appear on the surface of the indoor heat exchanger if the air conditioner is running under low-temperature cooling mode. When the temperature of the indoor heat exchanger drops to 0° or below the outdoor unit microcomputer will bring the compressor to a standstill to protect the complete unit.

The Principle and Special Functions of the Heating Mode

Principle:

- The air conditioner absorbs heat from outdoor air to transmit indoors thus increasing the room temperature. Heating capacity decreases with a reduction in outdoor temperatures.
- This type of hot air circulating system can increase indoor temperatures very quickly.
- Use this air conditioner with other heating equipment when outdoor temperatures are extremely low.

Defrost:

- The outdoor unit heat exchanger may frost when the outdoor temperature is low, humidity is high and the air conditioner has been running for some time, resulting in inefficient heating. In this case, the appliance automatically defrosts and heating is suspended for 6/8-10 minutes.
- Both the indoor fan and outdoor fan are brought to a standstill during auto defrost.
- An indicator light on the indoor unit flashes and mist might flow from the indoor unit during defrost. This is a result of rapid defrosting and is quite normal.
- Heating mode is automatically resumed on completion of defrost process.

Possible causes of failure of the air conditioner to function

A safety device may be activated in the temperature range as specified below, so that the unit might be stopped.

<table>
<tr><td rowspan="3">Heating Mode</td><td>Outdoor temperature over 24°C</td><td rowspan="3">Cooling Mode</td><td>Outdoor temperature over 43°C</td><td rowspan="3">Dehumidify mode</td><td rowspan="3">Room temperature under 18°C</td></tr>
<tr><td>Outdoor temperature below -7°C</td><td></td></tr>
<tr><td>Room temperature over 27°C</td><td>indoor temperature under 21°C</td></tr>
</table>

If the unit is left in cooling or dehumidify mode when the relative humidity is above 80% (door and windows open), dew may form from the air outlet

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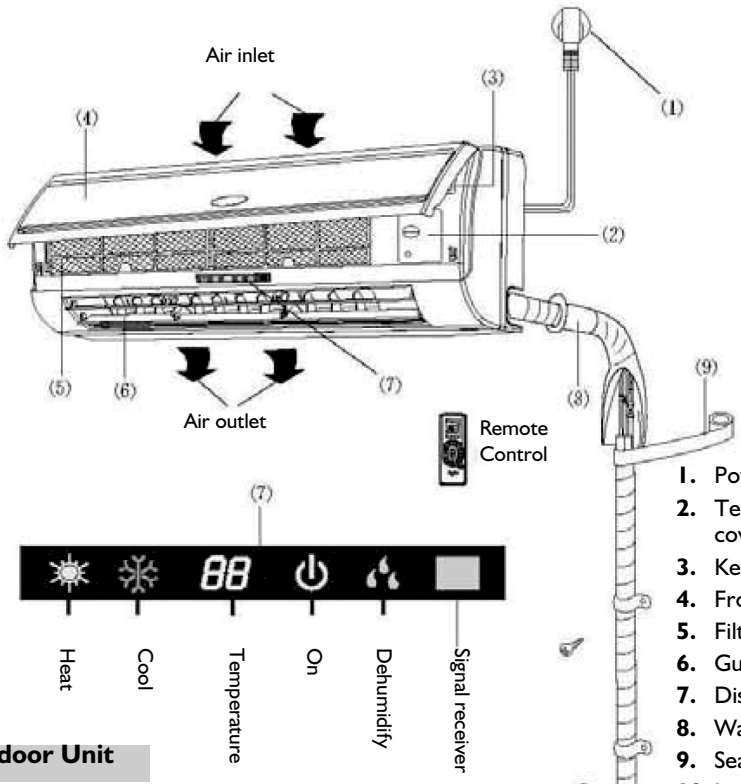
DESCRIPTION OF AIR CONDITIONER COMPONENTS

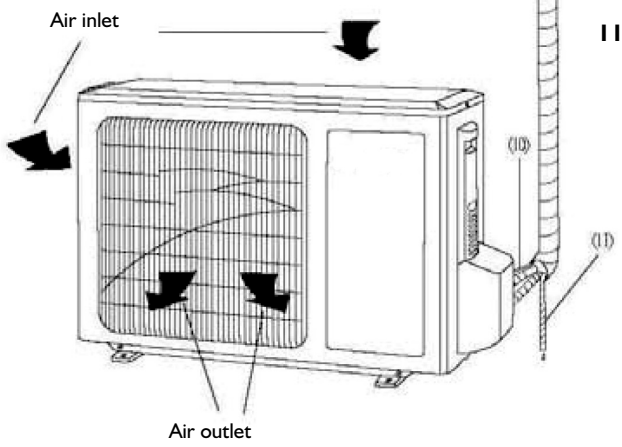
Indoor Unit

AMC 996 with INVERTER
AMC 998 with INVERTER



1. Power plug
2. Terminal board cover plate
3. Key switch
4. Front panel
5. Filter
6. Guide louver
7. Display
8. Wall pipe
9. Sealing tape
10. Indoor & outdoor power cord
11. Drain Pipe

Outdoor Unit



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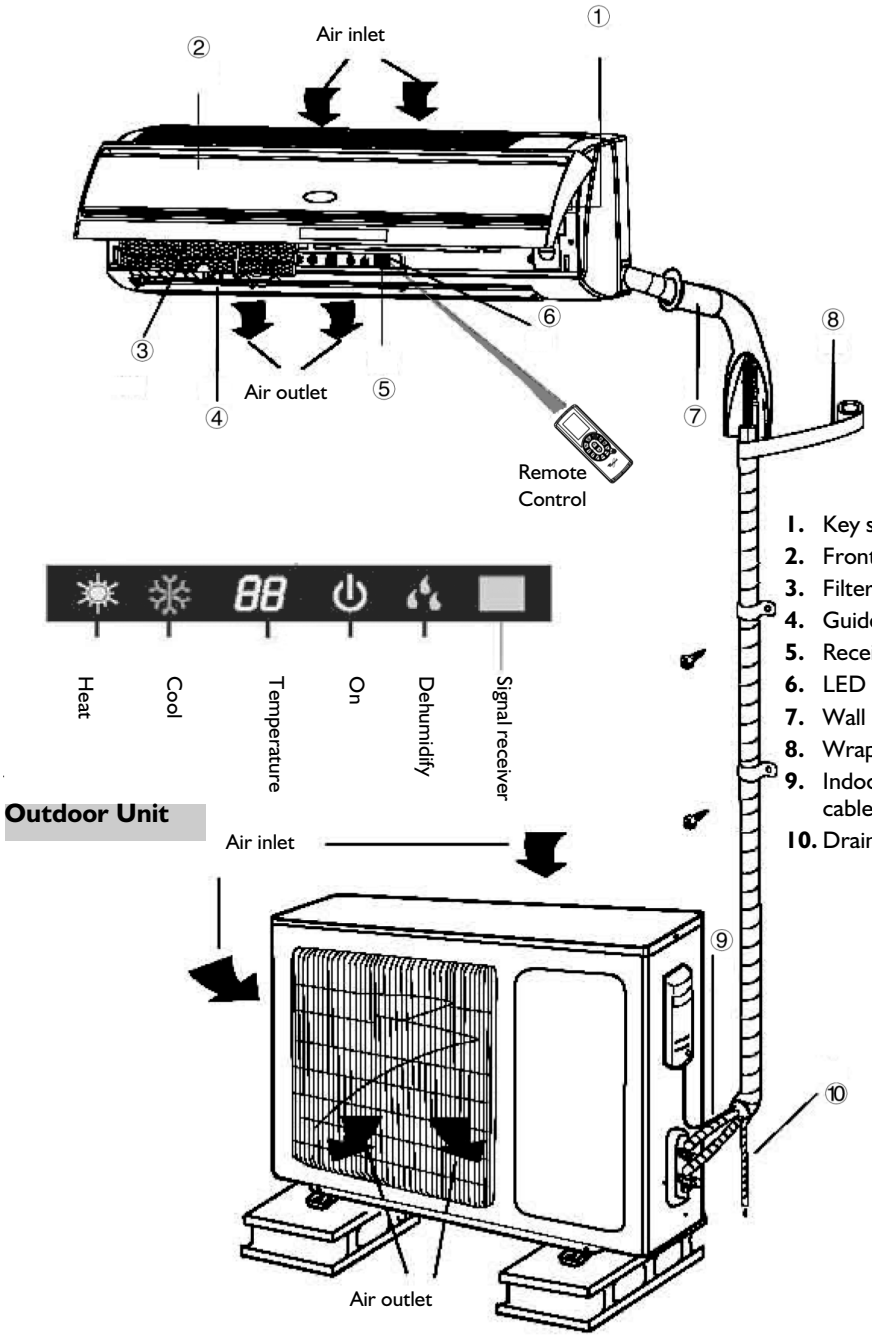
Indoor Unit

AMC 994



1. Key switch
2. Front panel
3. Filter
4. Guide louver
5. Receiving windows
6. LED Board
7. Wall pipe
8. Wrapping Tape
9. Indoor & outdoor cable
10. Drainage Pipe

Outdoor Unit

The actual unit may be different than the picture shown

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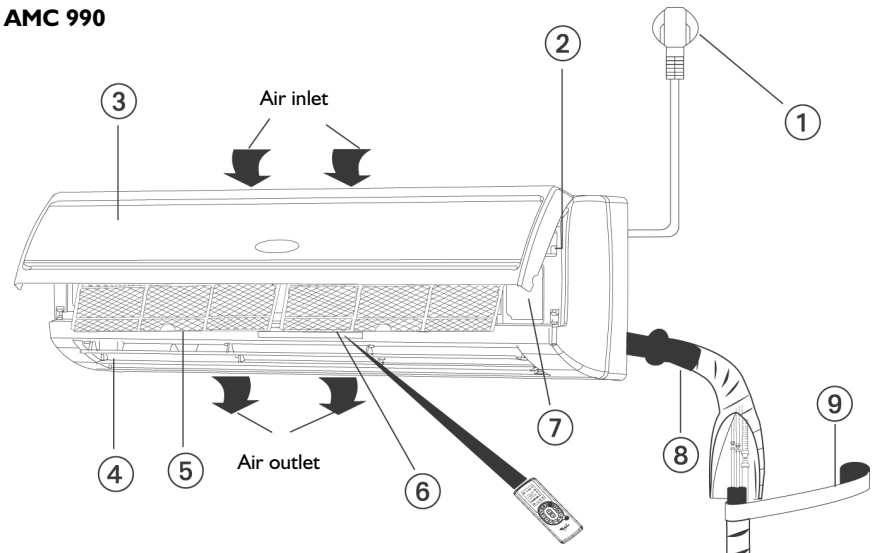
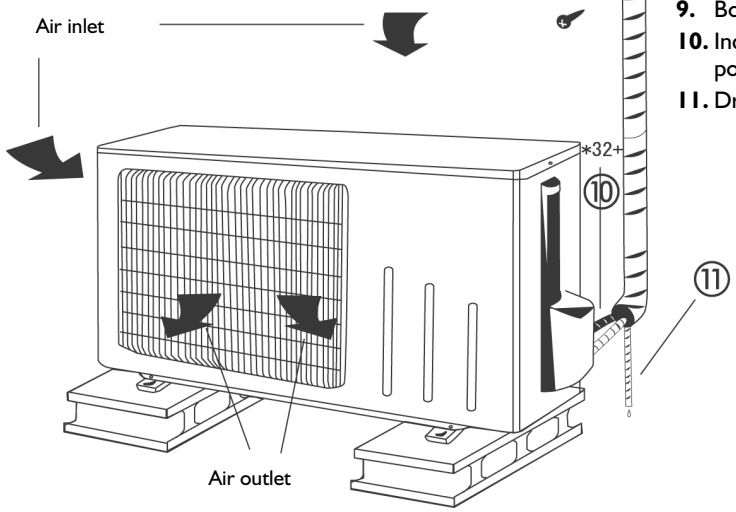
Indoor Unit

AMC 990



Outdoor Unit



1. Power plug
2. Key switch
3. Front panel
4. Guide louver
5. Filter
6. Remote control windows
7. Covering plate of Terminal Board
8. Wall pipe
9. Bondage tape
10. Indoor & outdoor power cord
11. Drain Pipe

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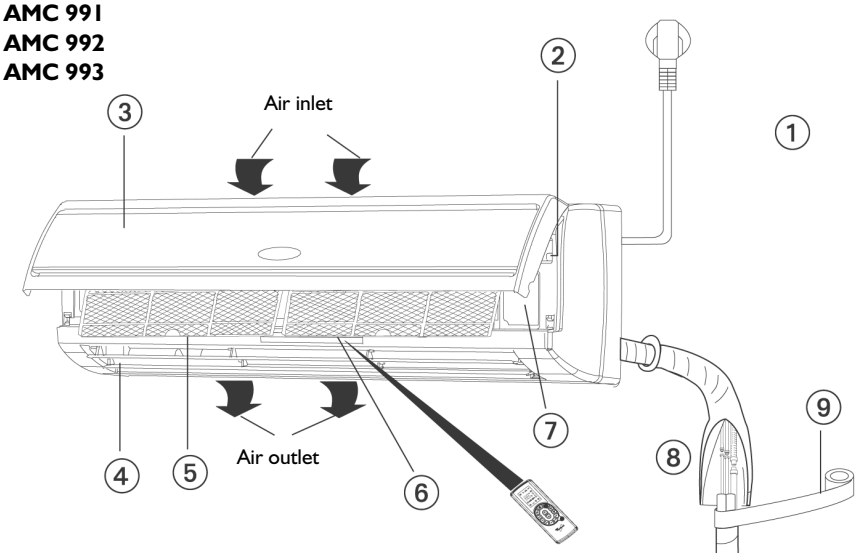
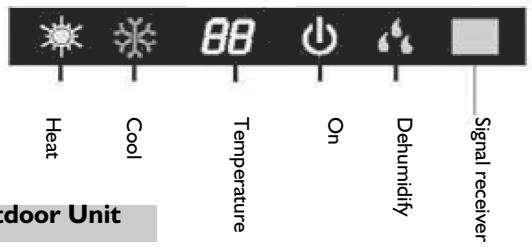
Indoor Unit

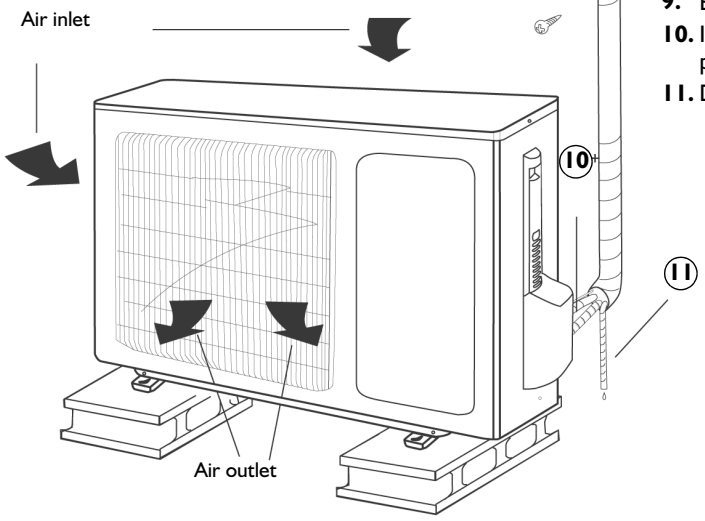
AMC 991
AMC 992
AMC 993





1. Power plug
2. Key switch
3. Front panel
4. Guide louver
5. Filter
6. Remote control windows
7. Covering plate of Terminal Board
8. Wall pipe
9. Bondage tape
10. Indoor & outdoor power cord
11. Drain Pipe

Outdoor Unit



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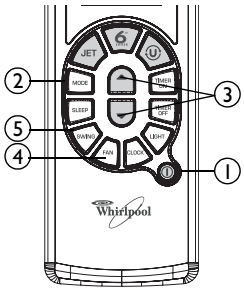
HOW TO USE REMOTE CONTROL

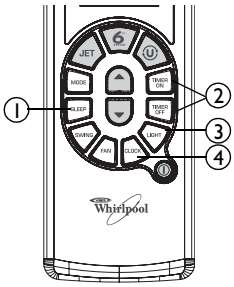
Operating Guideline - General Procedures

1. After the main unit is connected to power, press the ON/OFF key on the remote control to start the air conditioner. (Note: The guide louver on main unit will be closed automatically when the air conditioner is switched off).
2. Press MODE key to select the desired operating mode.
3. Press the UP or DOWN key to set the desired temperature.
4. Press the FAN SPEED key to set the fan speed. AUTO, LOW, MEDIUM or HIGH.
5. Press the SWING key to select the swing mode.

Operating Guideline - Optional Procedures

1. Press the SLEEP key to set the sleep mode.
2. Press TIMER-ON TIMER-OFF, UP and DOWN key to set the time for automatic start or stop.
3. Press the LIGHT key to turn the air conditioner display on or off.
4. Press the CLOCK key. The CLOCK icon will start to blink and you can set the time.





Signal Emission Head

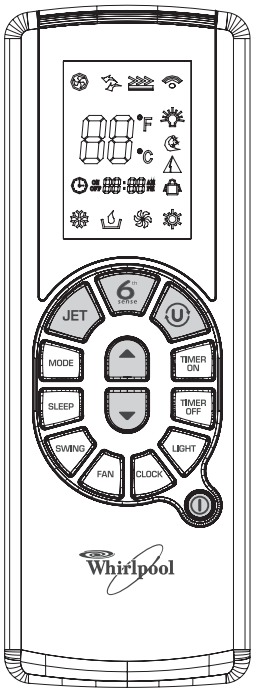
Description and Function of Remote Control Keys
Note: Be sure to point the remote control towards the signal receiver. Check that there is no obstacle between the remote control and signal receiver. Do not drop or throw the remote control. Do not drop any liquid onto the remote control, or expose it to direct sunlight or extremely hot temperatures.

This remote control is for general use and is applicable to multiple types (functions) of air conditioner. Please note that if a key is not applicable to this air conditioner it will not be described here.

ON/OFF ⏻
ON/OFF Key
Press this key once to start the unit, press twice to stop it.
Only the clock TIMER icon (if activated) is displayed when the unit is not running.

MODE
MODE Key
Press this key to change the mode according to the following sequence:

- COOL mode
- DRY mode
- FAN mode
- HEAT mode (Note: Cool-Only unit will not accept HEAT mode)



Remote Control

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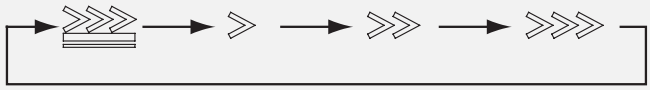
UP/DOWN
UP/DOWN Key
Press these two keys when in COOL, DRY, FAN or HEAT mode to set a temperature between 16 and 30°C. The temperature of each mode can be stored.

FAN SPEED
FAN Key
Press this key to change the fan speed cyclically as follows:



Indicates auto speed

Indicates low speed.

Indicates medium speed.

Indicates high speed.

Note: The fan is at low speed in DEHUMIDIFY mode. The fan speed can be memorized in each mode

SWING
SWING key
When the unit is running, press this key to activate the swing function, indicated by the swing icon. Press again to stop the swing function.

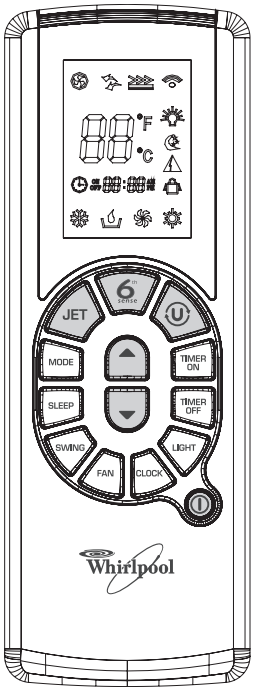
TIMER-ON
TIMER key
The timer setting runs on the 24-hour system. Press once to enter TIMER ON setup, in which case the TIMER ON icon will blink. At this point, press the UP key once to increase TIMER ON setting by 1 minute. If you keep holding this key down for 2 seconds or longer, the decimal point of the minute setting will increase by one every half second. Press the DOWN key once to decrease TIMER ON setting by 1 minute. If you keep holding this key down for 2 seconds or longer, the decimal point of the minute setting will decrease by one every half second. Once the time is properly set, press this key again to confirm the TIMER-ON setting. If TIMER ON is already activated, press this key to cancel.

TIMER-OFF
TIMER-OFF key
Press this key once to enter TIMER-OFF setup. The TIMER OFF icon will blink. The method of setting is the same as for TIMER ON.

CLOCK
CLOCK key
When you press of this key, the CLOCK icon will start to blink and enter the clock adjustment mode. In clock adjustment mode pressing the UP key will increase the clock by 1 minute each time. If the UP key is held down for 2 seconds or longer, the clock will increase by 10 minutes every half second. Pressing the DOWN key will decrease the clock by 1 minute each time. If the DOWN key is held down for 2 seconds or longer, the clock will decrease by 10 minutes every half second. After adjustment, press CLOCK again to confirm.

If no key is pressed for 6 seconds after TIMER ON, TIMER OFF or CLOCK setup, the unit will exit setup mode.

Remote Control



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JET

JET key

In COOL or HEAT mode, press this key to activate or disable the jet function. The JET icon will appear when the jet function is activated. The jet function will be automatically cancelled upon change of mode or fan speed.

ROUND U

ROUND key

Press this key once to activate the ROUND U function, in which case the ROUND U icon will appear. When the ROUND U function is on, the remote control will send a temperature message to the main control every 10 minutes. Press again to disable the ROUND U function.

Note: The ROUND U function means that the air conditioners regulates itself based on room temperature. It does this by a sensor placed in the remote control.

SLEEP

SLEEP key

In COOL, DEHUMIDIFY and HEAT mode, pressing this key once will activate the SLEEP function, and the SLEEP icon will appear. Pressing again disables the SLEEP function. On changing mode or starting/stopping the unit, the SLEEP function will be cancelled automatically.
The set temperature will rise max 1°C if the appliance operates in cooling mode for two hours, then it will remain constant (if room temperature is 26°C or above, set temperature will not change).
The set temperature will rise max 3°C if the appliance operates in heating mode for 3 hours then it will remain constant.

6th SENSE

6th SENSE key

Press this key to enter the 6th sense mode. Press again to exit the 6th sense mode and return last previous mode (COOL, DEHUMIDIFY, FAN or HEAT mode).

Note: The 6th sense mode enables the air conditioner to automatically select the appropriate operating mode depending to indoor temperature to make your environment comfortable.

LIGHT

LIGHT key

Press once to activate or disable the light function on the main unit.

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Replacement of Remote Control Battery and Precautions

1. Gently press down on the battery cover and push in the direction of the arrow to remove, as shown.
2. Remove the old batteries
3. Replace with two 7# dry cell batteries (AAA 1.5V). Ensure that "+" and "-" polarity is correctly positioned.
4. Close the battery cover on the remote control.

Precautions

- When replacing the batteries, do not use new batteries with old batteries, or different types of batteries as this may cause the remote control to malfunction.
- If you do not expect to use the remote control for some time, take the batteries out to prevent leakage of battery acid in the remote control.
- Operate the remote control within effective range.
- Keep the remote control at least 1 meter from any TV set or hi-fi equipment.
- If the remote control does not work normally, take the batteries out and reinstall after 30 seconds. If it still does not work install new batteries.
- To operate the main unit by remote control, point the remote control at the receiving device on the main unit, to ensure receiving sensibility.
- To send a message from remote control, the symbol will flash for 1 second. On receipt of the message, the main unit will emit a beep.

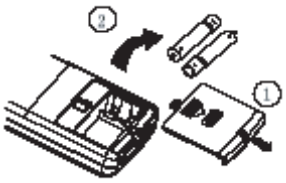
Emergency Operation (on models AMC 996 and AMC 998)

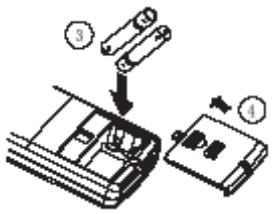
If your remote control is lost or damaged, you can use the 6th Sense /STOP key, in which case the unit will run in auto mode and you cannot change the preset temperature and fan speed.

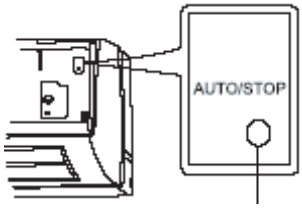
Operate as below:

START: In stop status, press this key to switch the air conditioner to 6th Sense. Depending on the indoor temperature, the microcomputer will automatically select the mode (COOL, HEAT or FAN) for your comfort.

STOP: In on status, press this key to stop the air conditioner.







key switch

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CLEANING AND MAINTENANCE

Warning

- Make sure to stop the unit and unplug it before cleaning your air conditioner. Otherwise you may risk electrocution.
- Wetting of air conditioner may cause the risk of electrocution. Never wash your air conditioner.
- Solvents such as paint thinner or gasoline will damage the appearance of the air conditioner. (Use only a soft dry or damp cloth and neutral detergent to clean the air conditioner cabinet).

Clean the front panel (Make sure to remove the front panel before cleaning).

1. Removing the front panel
Lift the front panel as shown by the arrow. Pull the slots at the two ends of the front panel with force to remove the front panel.

2. Cleaning the front panel
Wash with a soft brush soaked in water and neutral detergent. Wipe off the water and dry the panel (Note: To avoid discoloring or deformation, do not wash with hot water over 45°C).

3. Replacing the front panel (depending on the model)
Place the rotary holder on two ends of the front panel in the holding groove. Cover the front panel and clamp it securely as shown by the arrow. See Fig. 1 (a, b).

Fig. 1

Clean filter (Approx. every 3 months).

Note: Clean the air filter more frequently if the air conditioner is used in a dusty environment. To avoid injury, do not touch the fins of indoor unit with your fingers after removing the filter.

1. Removing the air filter
Grasp the groove on the two ends of the front panel. Pull as shown by the arrow with force to open the front panel at an angle. Then pull the air filter downward for removal. See Fig. 2 (a, b).

2. Clean the air filter
Clean the filter with a vacuum cleaner or water. If the filter is too dirty, wash with warm water (under 45°C) and neutral detergent. Dry in a cool place,

Note: To avoid discoloring or deformation, do not wash with hot water over 45°C. Never dry on the fire, as the filter may be burnt or deformed.

3. Replacing the air filter
Mount the air filter as shown by the arrow. Clamp the cover of the front panel securely.

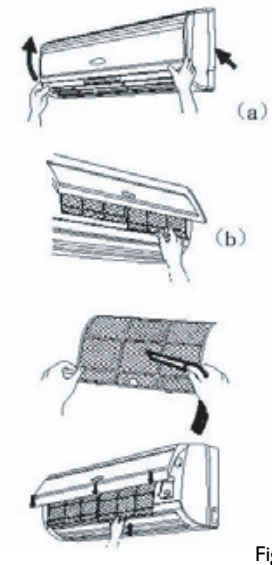

Fig. 2

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Checks before Seasonal Use

1. Check the air inlet/outlet on indoor and outdoor units for any blocking.
2. Check the grounding cable for reliability.
3. Check the battery of the remote control for replacement.
4. Check the mounting frame of the outdoor unit for damage. If damaged, contact a Whirlpool Authorized Service Center.

Maintenance after Seasonal Use

1. Disconnect from the power supply.
2. Clean the air filter.
3. Clean any dust and foreign particles on outdoor unit.
4. If the outdoor unit is rusted, paint on the rusty spots to prevent expansion.

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TROUBLESHOOTING

Warning:
Do not attempt to repair the air conditioner yourself. Incorrect repairs may cause electrocution or fire, so please contact the Whirlpool Authorized Service Center nearest you for professional repairs.
The following checks may save your time and costs.

Malfunction	Cause
Air conditioner does not start immediatly after a stop.	• To protect the air conditioner when started after a stop, the microcomputer control delays for 3 minutes before allowing the air conditioner to start.
An unpleasant odor is perceived at startup	• The air conditioner itself is odorless. Any odor is accumulated from the environment. The solution is to clean the air filter (see page 42). • If there is still any problem, the air conditioner should be cleaned (Please contact the Whirlpool Authorized Service Center).
You may hear a “gurgling” noise when the air conditioner is on	• When the air conditioner is started, or the compressor starts or stops while running, or the air conditioner is stopped, you may hear a gurgling noise that is the refrigerant flowing back and is not a malfunction.
A thin fog may flow from the outlet when the air conditioner is running in cooling mode.	• This may occur when the indoor temperature and humidity are high. This is because the indoor air is cooled quickly. • After a short time, the fog will disappear as the indoor temperature and humidity decrease
You may hear a slight crack when the air conditioner is started or stopped	• This is the sound of friction caused by expansion of the front panel or other parts due to the change of temperature
Air conditioner does not run.	• Is there a power failure? • Is the power plug loose in the socket? • Has the circuit protection device been tripped? • Is the voltage too high or too low? (see page 46 - have it tested by a professional). • Has the timer function been used correctly? (see page 39)
The air conditioner is not cooling (or heating) properly	• Is the temperature setting correct? (see page 38) • Is the air intake or outlet of the outdoor unit blocked? • Is the air filter clogged by dust? (see page 42) • Are all the doors and windows closed • Is the air flow set to “LOW FAN”? • Is there another heat source in the room?
Remote control cannot execute control	• The remote control sometimes cannot execute control if the air conditioner is subject to abnormal interference or frequent switch of functions. To resume normal operation, switch off and on again properly. • Is the remote control in range and not blocked by any obstacles? • Check the battery in the remote control. If low, replace the battery. (see Page 41) • Check the remote control for damage
Water leaks from indoor unit	• High air humidity • Condensation overflow • Joint of indoor unit drain pipe is loose
Water leaks from outdoor unit	• In cooling mode, water may condense on pipe or pipe joint due to cooling. • Defrost water flows out in heating or defrost (auto defrost) mode • In cooling mode, water from heat exchanger may leak

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Malfunction	Cause
Indoor unit makes noise	• The sound comes from the fan or compressor relay switching over (close/open). • Air conditioner may make noise in defrost mode or when stopped due to inverse flow of refrigerant in the unit
No air blows out of indoor unit	• When the temperature of the indoor heat exchanger is low during heating process, the indoor unit will stop air blowing to prevent blowing of cold air (for 3 minutes). • In heating mode, if the outdoor temperature or humidity is high and the outdoor heat exchanger has more frost, the air conditioner will activate the auto defrost function and the indoor unit will stop air blowing for 6/8~10 minutes. During defrost, water or steam may flow from the outdoor unit. • In dehumidify mode, the fan on the indoor unit may stop to prevent evaporation of condensing water and rise of temperature.
Moisture on outlet grill	• If the air conditioner is left running in high humidity, moisture may condense on the grill and accumulate there.
In case of the following events, please contact the Whirlpool Authorized Service Center nearest you.	
Stop the air conditioner and pull out the power plug.	• The air conditioner makes a shrill noise when running. • Air conditioner gives out an unpleasant odor when running. • Water leaks from the indoor unit. • Air break switch or leakage protection switch drips frequently. • Foreign matter or water enter the machine or remote control. • Abnormal overheating of power cord and plug.

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INSTALLATION SERVICE - PRECAUTIONS ON INSTALLATION

Important Precaution

1. The air-conditioning unit must be installed according to national wiring rules and according to this manual by professionals.
2. Contact the local Whirlpool Service Center or qualified technician before installation
3. Any change of installation position must be handled by professionals.
4. If the supply cord is damaged, it must be replaced by the manufacturer, its Service or similar qualified entity in order to avoid any hazardeous situation.

Basic Requirements for Installation

Installation in the following places may cause failure of the air-conditioning unit. Please contact Whirlpool installation and service agency if the installation in such places cannot be avoided.

- Environments with heat, steam, flammable or explosive gases or volatile solvents in the air.
- Near high-frequency facilities, e.g. welding machines, medical equipment,
- Region with high saline-sodium soil near the sea
- Places where the air contains oil (mechanical oil).
- Locations containing sulphide gases (such as sulphur springs);
- Other special conditions.

Indoor unit: Selection of Installation Position

1. The air inlet and air outlet must be far away from obstacles to ensure that the airflow can reach every corner of the room;
2. Choose a position where condensation water can be easily discharged and the outdoor unit can be easily connected;
3. Install out of the reach of children.
4. Choose a place capable of bearing the weight of the indoor unit without increasing noise and vibrations;
5. Ensure sufficient clearance and space for service and maintenance; ensure the indoor unit is at least 2.3m from the floor;
6. Choose a position at least 1 meter from any TV, sound system or other household electric appliances.
7. Choose a place where that the air filter can be easily accessed;
8. Ensure the installation of indoor unit is in conformity with the requirements of the installation dimension drawing (Refer to pages 48 to 51).

Outdoor unit: Selection of Installation Position

1. Choose a place where the noise and air flow from the fan will not affect neighbors, animals or plants.
2. Ensure good ventilation of outdoor unit.
3. There should be no obstacles near the outdoor unit obstructing the air intake and air exhaust of the unit;
4. The installation position shall be able to withstand the weight and vibration of the outdoor unit and ensure safe installation;
5. Select a dry place but not exposed to direct sunshine or strong wind.
6. Ensure that the outdoor unit is installed in compliance with installation dimensions for easy repair and maintenance (Refer to pages 48 to 51).
7. Height difference of fitting pipes shall be within 5 meters and the length of fitting pipe shall be within 10 meters.
8. Install the unit out of the reach of children.
9. Choose a place that does not interfere with public passage or view.

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ELECTRICAL SAFETY REQUIREMENTS

1. The power supply must be of rated voltage with special circuitry for air-conditioning. The diameter of the power cord must comply with requirements.
2. Applicable voltage range: the normal operating range of voltage is 90%~110% of rated voltage.
3. Never pull the power cord.
4. Ensure safe grounding and a grounding wire connected with the special grounding system of the building, installed by professionals. The mains must be fitted with electrical leakage protection switch and an air switch with sufficient capacity (Refer to the following chart). The air switch must also have a magnetic and a thermal tripping function to ensure protection in case of short-circuit and overload.
5. The minimum clearance between air conditioner and any flammable surface is 1.5m.

Model	Capacity of air break switch	Min. section of grounding cable	Min. section of power cable
AMC 996	20A	1.0M2	1.5M2
AMC 998	20A	1.5M2	1.5M2

Notes:

- **The live wire, neutral wire and grounding wire inside the power socket must be connected. Connect these wires correctly and reliably without short circuit.**
- **Incorrect connection could cause fire.**
- **AMC 993 will be connected only to a supply with the relevant resistance no more than Zmax=0.234 ohm and Zmax=0.051 ohm on the AMC 994.**
- **AMC 992 will be connected only to a supply with the relevant system impedance no more than Zmax=0.301ohm**

Grounding Requirement

1. As the air-conditioning unit is a Class 1 electrical appliance, reliable grounding measures must be taken.
2. The yellow and green cable inside the air conditioner is for grounding and must not be used for other purposes or cut. Do not tighten with tapping screws; this could cause electrocution.
3. The earth resistance must comply with the requirements of national standard GBI7790.
4. The user power supply shall have a reliable grounding terminal. It is prohibited to connect the grounding wire to the following items: 1) Water Supply Pipe 2) Gas Pipe 3) Sewage Pipe 4) Other positions that are considered unsafe professionals.

Other:

1. The connection between the air conditioner and power cables and the connection between separate elements shall be in accordance with the wiring diagram attached on the machine.
2. The model and rating of fuse shall be in accordance with the stencil on the control or fuse tube.
3. External static pressure of air conditioner at test position is 0Mpa.

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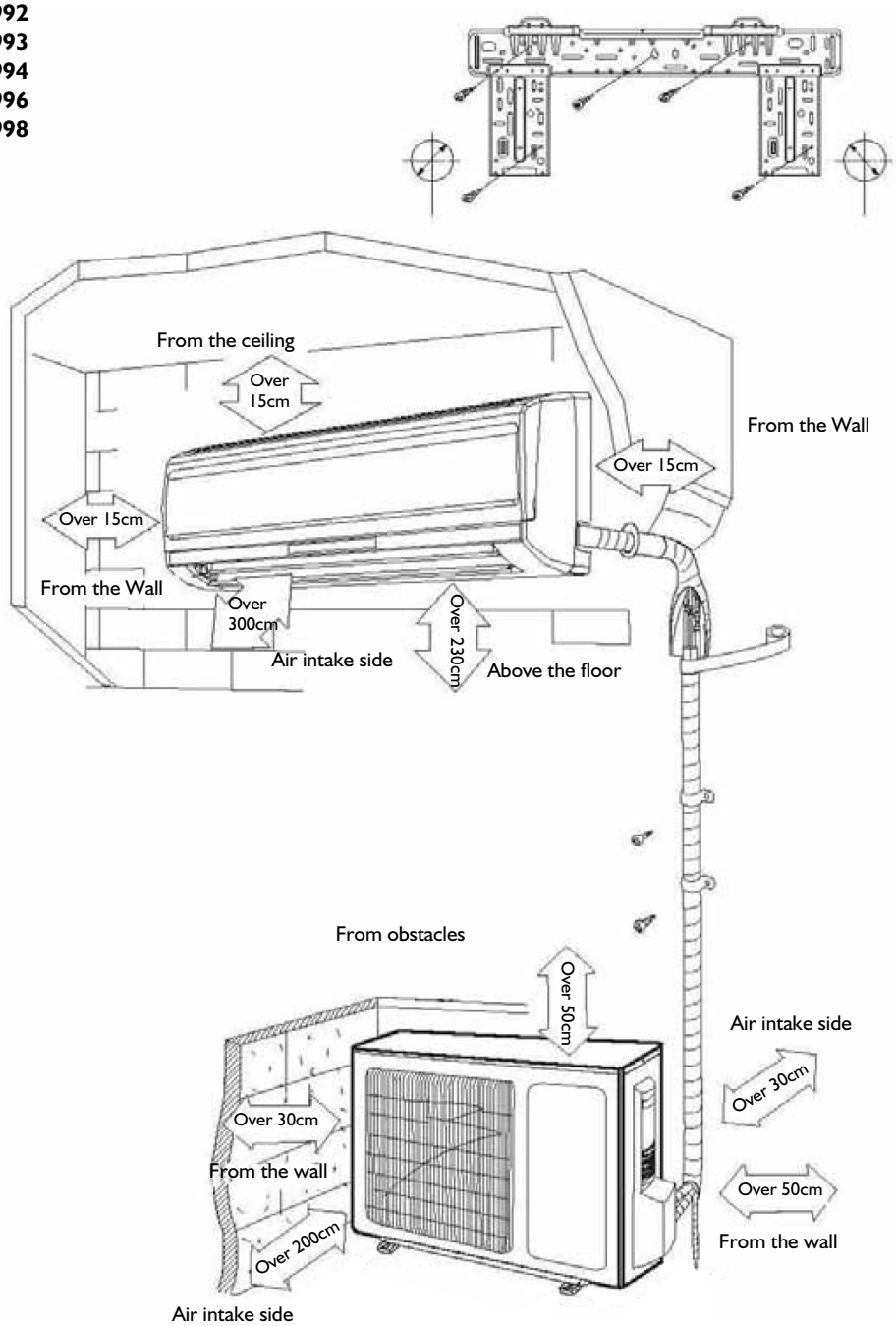
INSTALLATION DIMENSION DRAWINGS

AMC 990
AMC 991
AMC 992
AMC 993
AMC 994
AMC 996
AMC 998



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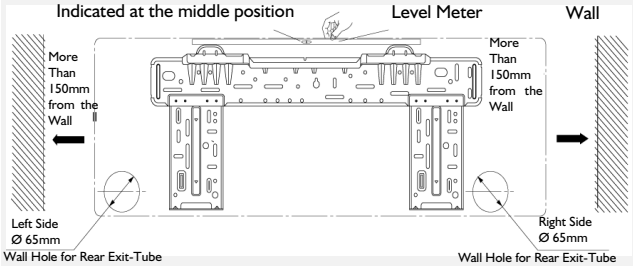
INSTALLING INDOOR UNIT

Installing Wall-Mount Frame

1. Level with plumb line or spirit level. As the drain outlet is on the left side, it is better for the left side to be lower when adjusting the wall-mounted board.
2. Use screws to secure the wall-mount frame on the wall.
3. After installation is completed, manually pull the wall-mount frame to check that it is secured. The mounted frame must be able to withstand the weight of an adult (60kg) and the fastening screws should have relatively even stress.


Indicated at the middle position
Level Meter
Wall
More Than 150mm from the Wall
More Than 150mm from the Wall
Left Side Ø 65mm
Wall Hole for Rear Exit-Tube
Right Side Ø 65mm
Wall Hole for Rear Exit-Tube

Wall Opening and Wall Pipe Installation

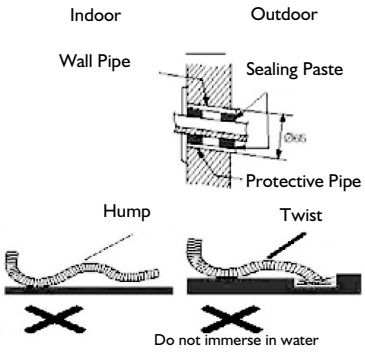
1. After deciding the position of the pipe according to the above Figure, drill a tapered hole (Ø 55 or 65)
2. To prevent the fitting pipe and the cable passing through the wall from being harmed and also to protect the hollow wall from rats, it is necessary to install a wall pipe.

Installing Drainage Pipe

1. The flexible drainage pipe must be tilted downward to allow the water to drain.
2. Make sure not to kink, hump or distort drainage pipe in the layout and not to immerse the outlet in water.
3. Extended part of flexible drainage pipe passing through the indoor unit must be wrapped in thermal insulation material.

Connection of Indoor and Outdoor Cables

1. Pull open the front panel (See page 42).
2. Unscrew the screw fastening the covering plate on terminal board. (See Fig. 1).
3. Pass the power cable through a separate cable duct on the back of indoor unit and pull it out from the front.
4. Connect the blue wire on the power connection cables to the "N(1)" terminal of the terminal board, connect the black wire to the "2" terminal, connect the brown wire to the "3" terminal and connect the yellow-green wire (grounding wire) to the "(⏚)" terminal (See Fig. 2).
5. Place the section of power cable with protective pipe into pressing groove and close the cover plate. Tighten the fastening screws to clamp the connecting cable.
6. Install the front panel back in place.
7. For Cool/Heat model, the signal control line is connected to the indoor unit via connector and securely clamped by the cable cleat mounted at the bottom of housing (See fig. 3)



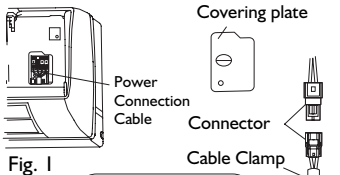


Fig. 1

Fig. 3

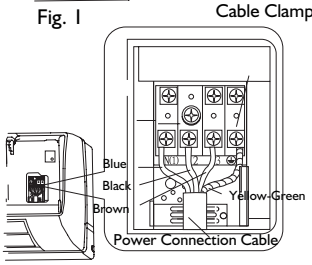


Fig. 2

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Notes:

If the connecting cable is not long enough, please contact the authorized service center for a length of special cable. No joints are allowed in the cable.

- **Make sure to connect the cable correctly. Incorrect connection will cause malfunction of some electrical parts.**
- **Tighten the terminal screw to prevent slack.**
- **After tightening the screw, gently pull the cable taut.**
- **Incorrect connection of grounding cable may cause electrocution.**
- **Make sure to fasten the junction cover plate securely and press it tightly against the connecting cable. Improper fastening may allow dust or water to enter or expose connecting terminal directly to external forces, and fire or electrocution could occur.**

Installing Indoor Unit

- Fitting pipe can come from four directions, i.e. right, rear right, left and rear left.

1. When installing the pipe on the left or right side, trim off any extra pipe left at the pipe outlet stub on the base of the unit. (See Fig. 1).

- When drawing out the power line, cut extra part 1. When drawing out the connecting pipe and the power line, cut extra parts 1 & 2 (or 1, 2 & 3);

2. Pull the fitting pipe out of the bottom case. Use adhesive tape to bind the fitting pipe, electrical cable and drain hose properly and then pass them through the fitting pipe hole (See Fig. 2).
3. Hang the claws on the back of the indoor unit to the hook on the wall-mounting frame. Move the unit left and right to control that it is steady. (See Fig. 3).
4. The installation height of the indoor unit must be at least 2.3m.

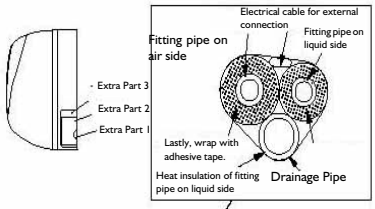

Electrical cable for external connection
Fitting pipe on liquid side
Fitting pipe on air side
Extra Part 3
Extra Part 2
Extra Part 1
Lastly, wrap with adhesive tape.
Heat insulation of fitting pipe on liquid side
Drainage Pipe

Fig. 1

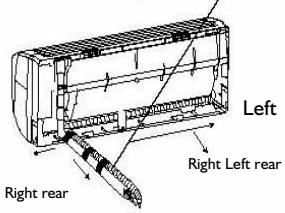


Fig. 2

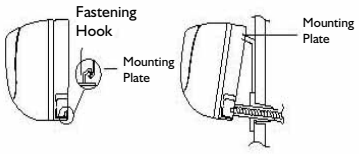
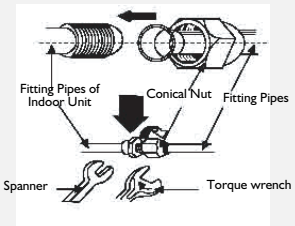


Fig. 3

Installing Connecting Pipe

1. The tapered end of the connecting pipe must be in line with the corresponding tape face of the valve joint.
2. Tighten the nut manually on the connecting pipe and then use a wrench to tighten it fully.
   Caution: Excess torque may damage the nut.

Hexagon Nut	Tightening Torque (Nlm)
Ø 6	15~20
Ø 9.5	31~35
Ø 12	50~55
Ø 16	60~65



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Cable connection

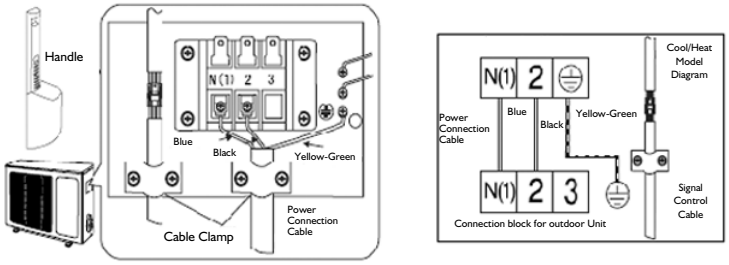
1. Remove the handle on the right side plate of the outdoor unit (one screw).
2. Remove the cable clamp, connect the power connection cable with the terminal on the connecting board and fasten it. The fitting line distribution must be consistent with the indoor unit.
3. Use cable clamp to fasten the cable connection. For heating and cooling type unit, also use the cable clamp to fasten the signal control cable, then fasten the corresponding connectors.
4. Confirm the fitting lines are fixed.
5. Install the handle (fastened with one screw).

Notes:

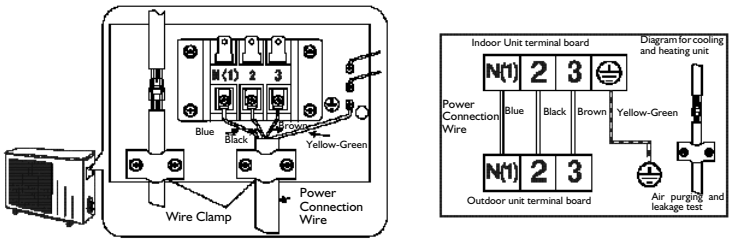
- Improper line connection may cause failure of some electrical components and parts
- When fastening the cable, leave some slack for the cable between the connection point and the fixing point.

Connecting diagrams for oudoor and indoor unit

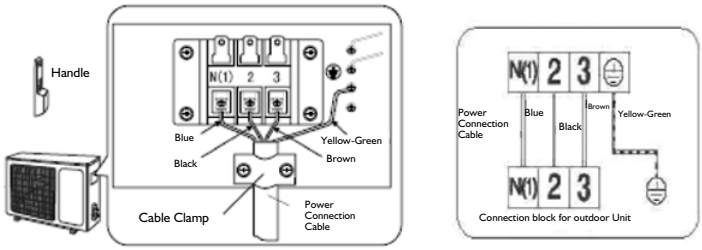
AMC 990/1/2



AMC993/4



AMC 996/8



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Vacuum-pumping and Leakage Inspection

1. Remove the nut cover at the shutoff valve.
2. Align with the center of the fitting pipe and manually tighten the conical nut sufficiently.
3. Use a wrench to tighten the conical nut.
4. Remove the liquid valve cap, the gas valve cap and the nut of refrigerant inlet.
5. Use an Allen wrench to twist off the liquid valve body and at the same time use screwdriver to open the valve core of the liquid valve. Now gas will flow out.
6. After the gas continues flowing for about 15 second and refrigerant gas begins to flow out, close the valve core and tighten the nut of refrigerant inlet.
7. Completely open the valve body of the liquid valve and the gas valve.
8. Turn and tighten the valve cap, then use soapy water or a leak detector to check for gas leakage at the outdoor and indoor units and pipeline connections.
9. If conditions permit, use a vacuum pump to pump air in the unit from the valve core.

Draining of Condensate Water of Outdoor Unit

When the air-conditioning unit is in the heating mode, the condensate water generated at the outdoor unit and the water generated by defrosting drains through the drainage pipe to the outlet.

Installation methods: as shown in the figure, insert the drainage joint of the outdoor unit into the Ø 25 hole on the base plate.

Connect the drainage pipe to the drainage outlet so as to drain the condensed water and water generated by defrosting to proper place.

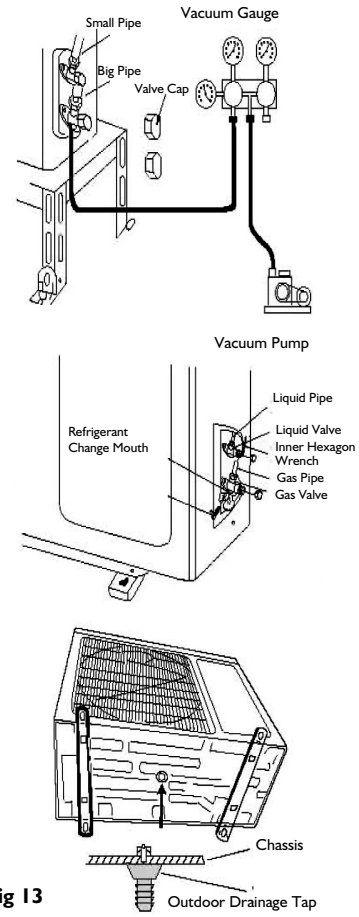

Fig 13

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CHECKS AND TEST RUN AFTER INSTALLATION

Check Items After Installation

Check items	Problems caused to improper installation
Is the installation secure?	The unit may fall, vibrate or make noise
Has gas leakage been checked?	May cause unsatisfactory cooling (heating) effect
Is the thermal insulation of the unit sufficient?	May cause unsatisfactory cooling (heating) effect
Is drainage smooth?	May cause condensation and dripping
Is the main supply voltage the same as the rated voltage specified on the nameplate?	The unit may break down or components may burn out
Are the lines and pipelines correctly installed?	The unit may break down or components may burn out
Has the unit been safely grounded?	Risk of electrical leakage
Are the models of lines in conformity with requirements?	The unit may break down or components may burn out
Are there any obstacles near the air inlet and outlet of the indoor and outdoor units?	May cause unsatisfactory cooling (heating) effect
Have the length of refrigerating pipe and refrigerant charge amount been recorded?	It is difficult to know how much refrigerant to use

Test Run

1. Preparation of Test Run
- Do not switch on the power before all installation work is completed.
- Confirm that the control line is correctly installed and all electrical lines are securely connected.
- Open the shutoff valves of the large and small pipes.
- Clear the unit of any foreign bodies, especially metal scraps, line ends and tools.

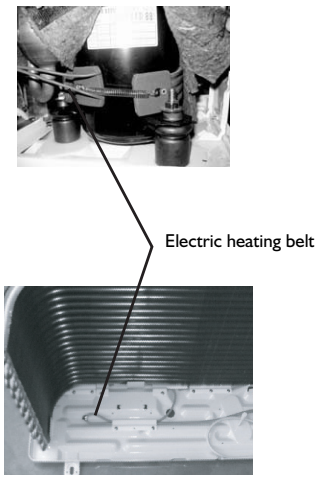
2. Test Run (Fig. 2 page 53)
- Plug in, press the “ON/OFF” key on the remote control, and the air-conditioning unit should start.
- Press the Mode key, select the operating modes such as cooling and fan, and check for normal operation.

ELECTRIC HEATING BELT

ELECTRIC HEATING BELT FOR INVERTER MODEL AMC 996, AMC 998 ONLY

In case of malfunction of the outdoor temperature sensor, both electric belts stop working. Under normal conditions, operations is as follows:

1. When the outdoor temperature is -5° or less and the compressor does not start, the electric heating belt on the compressor start; if the compressor is running or does not start but the outdoor temperature is > -2°C, the electric heating belt does not start. If the compressor does not start and the outdoor temperature is between -5°C and -2°C the electric heating belt on the compressor maintains its current status.
2. When the outdoor temperature is less or equal to 3°C the electric condenser heating belt will work. If the outdoor temperature is greater than 6°C it will not work. Between 3° and 6°C it maintains its current status.



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ELECTRICAL CONNECTION

1) For Great Britain only

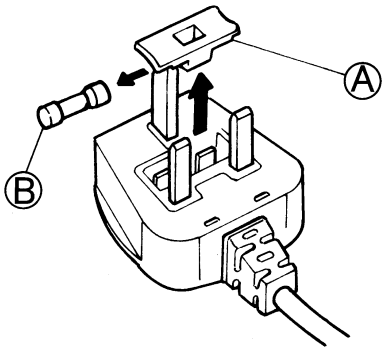
Warning - this appliance must be earthed

Fuse replacement

If the mains lead of this appliance is fitted with a BS 1363A 13amp fused plug, to change a fuse in this type of plug use an A.S.T.A. approved fuse to BS 1362 type and proceed as follows:

1. Remove the fuse cover (**A**) and fuse (**B**).
2. Fit replacement 13A fuse into fuse cover.
3. Refit both into plug.

Important:
The fuse cover must be refitted when changing a fuse and if the fuse cover is lost the plug must not be used until a correct replacement is fitted.
Correct replacement are identified by the colour insert or the colour embossed in words on the base of the plug.
Replacement fuse covers are available from your local electrical store.



2) For the Republic of Ireland only

The information given in respect of Great Britain will frequently apply, but a third type of plug and socket is also used, the
2-pin, side earth type.

3) Socket outlet / plug (valid for both countries)

If the fitted plug is not suitable for your socket outlet, please contact Whirlpool Service for further instruction. Please do not attempt to change plug yourself. This procedure needs to be carried out by a qualified Whirlpool technician in compliance with the manufactures instructions and current standard safety regulations.

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